

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (currently amended) [[ A ]] An isolated biopolymer marker peptide consisting of amino acid residues 2-17 of SEQ ID NO:1 diagnostic for Type II diabetes.

Claims 2-35. (cancelled)

Claim 36. (currently amended) A method for ~~diagnosing Type II diabetes determining the presence of an isolated biopolymer marker having SEQ ID NO:1 comprising:~~

- (a) obtaining a sample from a patient;
- (b) conducting mass spectrometric analysis on said sample in a manner effective to maximize ~~elucidation of discernible analysis of peptide fragments contained therein[[ ; ]] and comparing mass spectrum profiles of said isolated biopolymer marker having SEQ ID NO:1 to mass spectrum profiles of peptides obtained and analyzed from said sample;~~ and
- (c) ~~comparing mass spectrum profiles of a peptide consisting of amino acid residues 2-17 of SEQ ID NO.1 to mass spectrum~~

profiles of peptides elucidated from said sample, wherein  
recognition of a mass spectrum profile in the sample displaying the  
characteristic profile of the mass spectrum profile for the peptide  
consisting of amino acid residues 2-17 of SEQ ID NO:1 is diagnostic  
for Type II diabetes

(c) confirming the presence of said isolated biopolymer marker  
having SEQ ID NO:1 in said sample displaying a peak profile at  
about 1998 daltons in said mass spectrum profile;

wherein the presence of said isolated biopolymer marker having  
SEQ ID NO:1 is indicative of a link to Type II diabetes.

Claim 37. (previously presented) The method of claim 36,  
wherein the sample is an unfractionated body fluid or tissue  
sample.

Claim 38. (previously presented) The method of claim 36,  
wherein said sample is selected from the group consisting of blood,  
blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 39. (previously presented) The method of claim 36,  
wherein said mass spectrometric analysis is Surface Enhanced Laser  
Desorption Ionization (SELDI) mass spectrometry (MS).

Claim 40. (previously presented) The method of claim 36,

wherein said patient is a human.

Claim 41. (currently amended) A Type II diabetes diagnostic kit comprising: (a) a peptide consisting of ~~amino acid residues~~  
~~-2-17 of SEQ ID NO:1~~ and (b) an antibody that binds to said peptide in a sample from a patient.

Claim 42. (currently amended) The diagnostic ~~assay~~ kit of claim 41, wherein said antibody is immobilized on a solid support.

Claim 43. (previously presented) The diagnostic kit of claim 41, wherein said antibody is labeled.